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Richland Operations Office
P.O. Box 550
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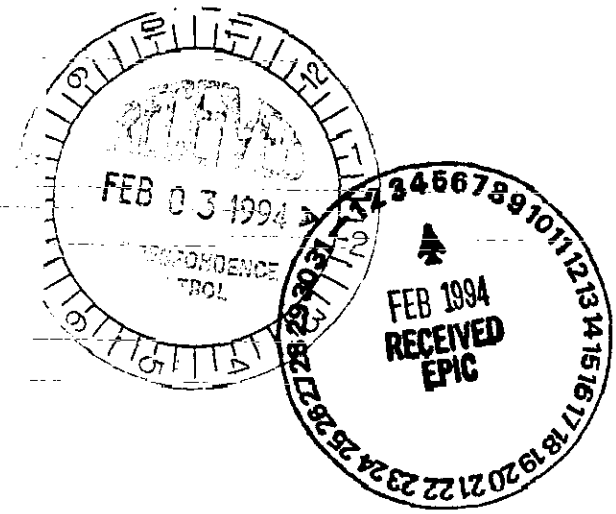

Mr. Dave C. Nylander
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7601 W. Clearwater, Suite 102
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Mr. Douglas R. Sherwood
Hanford Project Manager
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, Washington 99352

Dear Messrs. Nylander and Sherwood:

TRANSMITTAL OF "100 AREA SOIL WASHING BENCH-SCALE TESTS" (DOE/RL-93-107, DRAFT A) TO COMPLETE M-15-08C

Enclosed please find the subject treatability test report submitted by the U.S. Department of Energy, Richland Operations Office (RL), to the U.S. Environmental Protection Agency (EPA) and the State of Washington Department of Ecology (Ecology) for review. Submittal of this report to EPA and Ecology by January 31, 1994, completes Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-15-08C. As a treatability test report is designated a secondary document per section 9.2.3 of the Tri-Party Agreement, RL requests EPA and Ecology to provide comments on the report by March 17, 1994.

The purpose of the subject report is to communicate results and evaluation of bench-scale testing of physical separations and chemical extraction methods as a means of separating radioactively and chemically contaminated soil fractions from uncontaminated soil fractions. In addition, RL provides recommendations and supporting rationale for continuing with the next phase (pilot-scale test) of the 100 Area soil washing treatability study. This recommendation is based on promising performance, encouraging economics, and the need for additional information on larger scale equipment.

Evaluation of the test work indicates an overall volume reduction of more than 80% can be achieved by the physical separations methods for soil samples collected from the 116-D-1B liquid waste disposal trench. This level of volume reduction coincides with residual levels of the radionuclide and chemical contaminants of focus (Cs-137, Co-60, Eu-154, and Cr) at or below the Target Performance Levels established for the test. Test results on soil samples collected near the inlet of the 116-C-1 liquid waste disposal trench indicate waste sites containing similarly contaminated soils may not be optimal candidates for soil washing volume reduction treatment. Generally, chemical extraction treatment methods were found to enhance physical separation performance.

Please refer comments or questions regarding this correspondence or the 100 Area soil washing treatability test to Mr. Eric Goller on (509) 376-7326.

Sincerely,

Steven H. Wisness
Hanford Project Manager

END:EDG

Enclosure

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R. Stanley, Ecology
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CORRESPONDENCE DISTRIBUTION COVERSHEET

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Subject: TRANSMITTAL OF "100 AREA SOIL WASHING BENCH-SCALE TESTS" (DOE/RL-93-107 DRAFT A) TO COMPLETE M-15-08C

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